# SCARABS

Rich Cunningham 3889 Walnut Avenue Chino, CA 91710 Occasional Issue Number 13

WITHIN THIS

**ISSUE....** 

William B. Warner 2338 W. Rockwell Court Chandler, AZ 85224 Jé banse hujé, te hooinda

Don't Catch That -or-Disease Risk Reduction & Rodent Inquiline Collecting

by William B. Warner

It has been four days since you filled kill jars with rare, inquiline Aphodius and Onthophagus you so painstakingly excavated from the dung middens and burrows of woodrats, prairie dogs and pocket gophers. It was a glorious trip, and you finished pinning up the specimens late last night just before you started running a fever. After some aspirin and a few restless hours of sleep you wake up a 4:00 A. M. with a killer headache and a fever now running 104° F. A bothersome sensation causes you to feel under your left arm, and you find a tender, already walnut-sized swelling in your armpit. Your heart sinks ... you know you have to get to the hospital soon. You know you will have to explain to the doctors what you no doubt have, because if you don't you could die before they get the diagnosis correct. You know that antibiotics will probably cure you quickly, unlike the scores before you who died a grisly death. You also know that you will now be a statistic because Plague, the historical killer of millions, is the only worldwide reportable disease. Your only solace is knowing that "... at least it isn't Hanta."

This is not as unlikely a scenario as one might think. At least two scarabaeologists in recent years have contracted plague while collecting in prairie dog mounds. Plague is a disease of rodents, spread by fleas, and can readily infect man. Fleas of prairie dogs, ground squirrels, marmots, wood rats, rock squirrels, pocket gophers and many other groups of rodents are known plague vectors. Most human victims in the U. S. become infected with plague from unknowingly picking up fleas when walking through prairie dog towns, or from infected wild fleas brought into their home by a pet. Pets can also contract plague, and plague can be transmitted from mammal to mammal via inhalation (hence the term "pneumonic plague").

Barney Streit

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Every so often a plague epidemic (an "epizootic") will course through a rodent population, killing off most of the rodents in months. Such an epizootic in white-tailed prairie dogs was tracked as it slowly spread across northeast Arizona during 1995. After mass die-offs of their hosts, newly emerged and potentially infected fleas will concentrate near the mouths of now empty rodent burrows. A beetle-hungry entomologist or other animal passing by or entering the burrow is like ringing the flea dinner bell-in the flea's world when you are hungry any warm body will do in a pinch! So stay away from inactive burrows and prairie dog towns. You can still get plague from fleas even in active burrows, however.

There are also other disease concerns. albeit the incidence of infection is low, when working with rodents. Chagas disease has been isolated in the United States, so obviously, rubbing Triatoma or Rhodnius feces into an open wound or onto mucous membranes is unwise. There is always a small chance of contracting Chagas, various fungal diseases and Hanta viruses via inhaling dust during burrow excavations. The highest potential mortality from these is perhaps Hanta, although the serious forms have so far been isolated only from field mice (Peromyscus). At least one wood rat (Neotoma) has tested positive for exposure, but it was believed to be infected, not infectious. Still, although inquiline scarab collectors would normally not target field mice burrows, field mice may use Neotoma mounds and other larger rodent nests as sites for their own nests, so be careful.

#### The Plague Scooper 2000<sup>TM</sup>

Malaysian Jungle Rumble

New Address

Sweet Smellin' Stuff

Nikon 200 mm Close-Up Lens

Bugs on the Net

The Ultimate Collecting Hat?

Rich and Barney's Excellent Adventure

#### **Infection Prevention**

Wearing respiratory protection when doing burrow excavations is wise. Any type of dust mask will help prevent airborne pathogens from being inhaled during "rodent work." The professional epizootic investigators, however, wear Tyvek suits and use respirators with HEPA filters anytime they are doing Hanta virus surveys. This may seem like and overkill given the low probability of contracting Hanta, and is probably mandated by bureaucrats paranoid about workman's compensation claims. But, with the very high mortality experienced with Hanta infections in the United States, it might be prudent to err to the side of caution. In other words, wear a good dust mask and stay away from field mice nests!

Some scarabaeologists have used that tried-and-true Aphodius collecting method that, for lack of a better name, we will call "Gordoning." This consists of lying down on the ground at the entrance to a prairie dog burrow, jamming your arm into the burrow as deeply as you can, and scraping back the soil on the bottom of the burrow with your hand or a spoon. Obviously, this maximizes your chances on coming into contact with plague-vectoring fleas, as history has proven. It also maximizes your chances your chances of breathing in airborne pathogens, finding the business end of a rattlesnake by the Braille Method, or coming into contact with a pair of large incisors belonging to a frightened rodent.

So, how does one avoid these perils and still get the beetles? The answers lie in proper clothing, chemical repellents, and in putting some distance between yourself and the potentially hazardous burrow biota.

Proper clothing includes light-colored pants, with the cuffs stuck into the socks, and preferably a long-sleeved, light-colored shirt with the cuffs inside of gloves. Generally, most collectors will skip the gloves and long-sleeved shirts and opt for blue jeans. I can tell you from personal experience (with a severe cat flea infestation at a dairy I visited a few years ago) that fleas are very difficult to dislodge from denim, and dark-colored clothing makes them more difficult to spot.

Chemical repellents sprayed on pants legs, shoes and exposed socks are a big help. DEET formulations and Permanone (permethrin) are EPA/FDA labeled ectoparasite repellents for application to human clothing. Permethrin has an advantage in that, in addition to having repellent activity, it is also an insecticide that will kill fleas that contact treated clothing.

Under the "putting some distance between yourself and the potentially hazardous burrow biota," *Scarabs* would like now to formally introduce the PLAGUE SCOOPER 2000<sup>TM</sup>. This handy device can be made quickly and cheaply, and when used with a five-gallon plastic pail, will keep you about as far from those hopping vectors as is physically possible. It has been successfully used in its first outings in Arizona and Colorado to collect series of a new *Aphodius* and *Aphodius dentigerulus* in white-tailed and black-tailed prairie dog mounds respectively.

To make your own PLAGUE SCOOPER 2000, follow these easy steps:

1) Go to the "dollar store" and buy a ladle with a scoop diameter of about 2.5 inches (~ 7 cm.). You can also steal the one in your kitchen, but your spouse may beat you with it when you return it covered with dirt and rodent poop. Also, plague bacilli can survive in soil for a little while. So, if you do this, I recommend you wash it well prior to that next bowl of minestrone.

2) Obtain a 6-7 foot or longer piece of PVC pipe one inch in diameter, or oneinch electrical conduit, or similar diameter stiff, lightweight piping. The end of a tubular net handle works well too!

3) Drill a hole through both walls of the pipe, perpendicular to its length, and about once inch (2-3 cm.) from one end.

4) Fit the ladle handle inside the pipe and affix it to the pipe with a cotter pin, bolt, or piece of wire running through the holes in the tube and the hole in the end of the ladle handle. (Drill one if there is not one there already.) It is best to have some side-to-side play in the connection so that the ladle can go around mild burrow turns.

5) To use, simply jam the ladle end down a burrow, turn it so that the ladle scoop is down, and scrape back up to the burrow entrance. A good handful of soil and rodent pellets will come up with each scraping. The soil can either be picked through by spreading it out at the site (not recommended as you will have scraped-up fleas too), or you dump it into a five-gallon pail and move quickly to the next burrow. The pail's contents can be floated, picked through by hand, or run through a Berlese funnel later. I found a five-gallon pail more than sufficient to keep fleas from escaping. If you are interested in collecting the fleas, simply blow onto the dirt in the pail and fleas will start "popping" about in response to the carbon dioxide in your breath.

Remember that anytime you are working around rodent dung (or any dung, for that matter), you are potentially exposing yourself to diseases and parasites. Being prepared and taking a few simple steps to avoid inhalation or ingestion of the "beetle medium"—or becoming a paratenic host to ectoparasites of the "medium's producer"—will keep you healthy enough to collect again.

#### Scarab Collecting in Malaysia -or-The Rumble... In the Jungle

by Barney Streit

For quite some time I have been intrigued by the collecting expeditions led by lepidopterist Dr. Thomas C. Emmel. His company is now called Expedition Travel, Inc. The address is 1717 NW 45th Avenue, Gainesville, Florida 32605. Their telephone numbers are (352) 392-5894 (days), (352) 377-6300 (evenings) and (352) 392-0479 (FAX). Of all the trips offered, the trip to Malaysia most interested me.

I was fortunate enough to save up for the not-insignificant cost (\$2,940.00 per person from Los Angeles) and actually attend the May, 1997 trip. What follows is an account of this trip in hopes of supplying our beloved readership with tips to make any future trips productive, predictable and enjoyable.

Even though this trip is designed for lepidopterists, I reasoned that, "Where there are great butterflies, there will be great scarab beetles." This assumption, as we shall see, proved to be true, not only for scarabs, but also cerambycids.

## The Big Question

As a personal aside, I was accompanied on this trip by my long-standing girlfriend, Sandra. At some point during this trip, it was my intention to propose to her. Many of my friends were queried as to what they thought the most opportune time to "pop the question" would be. Many thought that deep within the bowels of tangled jungle would be the most memorable spot. My friend, and yet again neighbor, Chuck Wirth, disagreed. So, I took his advice and asked her on the plane flight to Malaysia. Chuck reasoned, probably correctly, that if I asked her after I set out my own human dung traps. I would no doubt remain a bachelor forever.

#### Vaccinations and Medicines

In preparation for this trip, Expedition Travel recommends inoculations for (1) cholera and (2) yellow fever. This information is incorrect. I checked into the Travel Clinic at a large medical center here in Tucson. Cholera inoculations are problematic, and are not recommended. Yellow fever is found in the New World only. Instead, I received (1) tetanus booster, (2) polio booster (needed if you have not had a booster as an adult) (3) the newly-developed hepatitis A vaccine (another inoculation 6-12 months confers lifelong immunity) and (4) Japanese encephalitis vaccine, which is a set of three shots, with the last two given one week and one month after the first. The Japanese encephalitis inoculation is recommended for travelers to Malaysia for all months of the year, according to the Center for Disease Control.

Malaria protection is best offered by the new mefloquine (Larium<sup>®</sup>) drug, which protects against the new strains resistant to the older drugs such as chloroquine and fansidar. These are tablets taken once a week, starting one week before until four weeks after your return. Be forewarned, this drug is very expensive.

Two tablets of the antibiotic Cipro were dispensed in case of traveler's diarrhea, but were not needed.

#### **Getting There**

Transportation provided by Malaysia Airlines was memorable. It should be, as you are traversing 10 time zones from Los Angeles, for a nine hour difference. As you board the Boeing 747, you will be struck by the appearance of the flight attendants. The men wear green bow ties and tuxedo-like jackets, while the gorgeous ladies are adorned in two-piece kimono-like outfits and sandals.

Prepare to eat like a pig. You will be served dinner and breakfast, each with your choice of two entrees. Red or white wine is served with dinner. Moist towelettes (hot or cold) are offered at appropriate times, as well as a nice, malty beer and of course peanuts.

There is a one-hour stopover in Taipei, Taiwan, followed by the short (4 hour and 10 minutes) jog to Kuala Lumpur, the capital city of Malaysia. This trip was attended by only four people, so we were on our own for the first day. Travelers to Malaysia are informed verbally by the airline, and also on your Departure/ Arrival Card:

Be Forewarned Death For Drug Traffickers Under Malaysia Law

So, guess what country in Southeast Asia has no drug problems?

At the airport, you can exchange dollars for ringgits, the Malaysian equivalent of our dollar. The ringgit is designated as "RM" on merchandise, to distinguish it from other currencies. At this writing, the ringgit was worth just under 40 cents, getting you roughly 2.5 ringgits per dollar. We traded \$300 dollars, and used less than half of it, as credit cards are widely accepted. After customs, we took a taxi to the Holiday Inn Centre, 50750 Kuala Lumpur, West Malaysia S.A. 28130. Their telephone number is (03) 293-9233, or (03) 293-9634 (FAX). Try and sleep as much as you can. The food is great right there in the hotel, offering American food if you desire it.

#### Kuala Lumpur - The Capital

The next morning, we met our guide and the other couple attending, who flew in from Hong Kong. By comparison, the 1996 expedition to Malaysia was attended by a dozen lepidopterists. The first trip was attended by 33 people!

By the way, I learned lepidopterists in California and elsewhere have a nifty way of discovering new localities. If the bug is host plant specific and the host plant is known, the collectors will look up references to the distribution records for that plant in botanical books. Go find the plant, and whamo!, there's the bug! Wouldn't life be simple if we could simply do this for *Bolbolasmus variabilis* here in Arizona, for example?

The first day was spent touring the capitol city of Malaysia, Kuala Lumpur. The first stop was a local butterfly farm, which also had a nice display of preserved and live Coleoptera. Next stop was the Negara Museum, which is the National Museum. Its address is Jalan Damansara, 50566 Kuala Lumpur. There were a few small displays of insects. The main thrust of this museum is the anthropology of the Malaysian Archipelago. After lunch, Batu Cave, a fantastic limestone formation with Hindu temples inside was visited. The cave entrance is atop a long series of steep, monkey infested steps. Next we toured the Royal Selangor pewter factory and showroom. After a rest at the hotel, we walked to a nearby restaurant for a dinner of traditional Malaysian cuisine. As an aside, gridlock is an everyday occurrence in Kuala Lumpur.

#### **Cameron Highlands**

Cameron Highlands is a pleasant fourhour drive from Kuala Lumpur, passing rolling hills of oil palm plantations. We stopped at Kuala Woh Park, were males of Rajah Brooke's Birdwing (*Trogonoptera brookiana*) were abundant on wet sand. I had always envisioned birdwings as speedy fliers, judging from their powerful divebomber-like anatomy. This is not true. Instead, they tend to flit around in a leisurely fashion unless frightened by a clumsy American coleopterist with a tennis-serve swing.

From the park, Highway 59 winds steadily upward. There were large amounts of fresh cutdown along the roadside, probably a paradise for collectors of Cerambycidae.

Our lodging was at the finest place in the Highlands: Strawberry Park Resort. Contact information is P. O. Box 81, Lot 195 & 196, Tanah Rata, 39000 Cameron Highlands, Pahang, telephone 6(05)-4911166, FAX 6(05)-4911949. This Tudor-styled resort consists of 230 rooms and apartments 6,000 feet above sea level. My second-floor room (#421 in Block D) was chosen for lighting at night. It has a covered porch, facing jungle, where a sheet can be taped. I ran a self-ballasted mercury vapor and one BL tube off a Radio Shack 240 to 110 volt stepdown transformer. Here, and at the lights of the hotel, the large scarab Cheirotonus parryi, belonging to the subfamily Euchininae is taken. I took one large male and two females. The dynastid Xylotrupes gideon flew in as well.

Dung beetle trapping was not impressive at this high elevation, yielding only a few specimens of *Onthophagus*. It should also be mentioned that I set out fermenting malt and banana traps at the three primary localities visited this trip. These yielded no specimens. Yet, at the butterfly farm back at Kuala Lumpur, I observed cetonids feeding on fermenting banana and pineapple.

During our stay in the Cameron Highlands, side trips included the BOH (Best of Highlands) Tea Plantation, which was done on a rainy day; a trek to Robinson Falls; and a drive to the top of Brinchang Mountain, where Lepidoptera hilltop.

Another interesting trip was at the 31 km marker on Highway 59. Here, there is a small village of aboriginal people behind a small store. A path leads up into the jungle along a stream. At a couple spots, the locals collect insects for a dealer in Tapah. Teenagers scale flowering trees for large, iridescent Buprestidae, adults and children net butterflies along stream clearings, others bring in giant walking sticks. Nets were fashioned from plastic bags, attached to a wire hoop taped to a pole. Though the hoop was hardly bigger than a birdwing, it was amazing to see how accurate some of the young children were. It was embarrassing to miss badly in front of them with our nice 15-inch BioQuip nets.

# A Neat Extendable Net

While on the subject of nets, our guide Cheng exhibited a nice, compact, fiberglass telescoping net from Japan. It telescopes with a quick twist of the wrist to any size, unlike our aluminum tropics net, with its aluminum sections which must be screwed together one-at-a-time. This net can be purchased from:

Mr. Hajai Shiga Konchu KK, 7-6-1-chome Shibuyaku Shibuya Tokyo JAPAN † 150

He can be reached by telephone at 81-33-4096401, or by FAX at 81-33-4096160. Although the catalog is in Japanese, he circled the items of interest.

# A Local Dealer

On the way to our next destination, we stopped for a short visit at the home of the aforementioned insect dealer:

Mr. Chong Kia Kwang 61, Taman Tapah Jalan Pahang 35000 Tapah Perak MALAYSIA

His home telephone number is 011-546982, and his telephone/FAX number is 05-4012266. I saw large numbers of insects stored bulk in alcohol, and also dried in cellophane stapled over cardboard rectangles. At no time did I see any collecting data on any of these specimens. Perhaps the y were all collected at the same locality.

#### **Maxwell Hill Resort**

Our second destination was Maxwell Hill Resort, near the city of Taiping. This operation is run by the Malaysian government. You must park your vehicle at the bottom of the hill, and take a Land Rover (driven at Indianapolis 500 speeds by government drivers) up to the lodgings. The term "resort" is a bit of a misnomer. The entire place can house only 66 people at a time. There are several bungalows. The best collecting is at the lowest one and at the highest one. We stayed at the lowest, or Permai View Bungalow, which has a spectacular view of Taiping.

Conditions are a bit primitive. Ladies should have no problem staying here if they are forewarned first. The toilets are flush. By "flush" I mean they are embedded flush in the floor. This is the only bungalow with hot water. Showers must be taken by splashing water on yourself with a large plastic cup, which is filled from a faucet. Cheng provides homecooked food courtesy of his wife. His parents live in Taiping, so he visited each day while we collected. He returns late in the afternoon with fresh fruit and fantastic food.

Again, I set up lights under a covered porch. The Cerambycidae that flew in were big, varied and spectacular. The same can be said of the moths, which included nearly two-dozen species of Sphingidae, the Atlas Moth (*Attacus*), the Comet Moth (*Argema*) and the large Urania Moth (*Lyssa*). The big saturniids come in just before dawn.

As for scarabs, Maxwell Hill was the high point of the expedition. There was *Chalcosoma atlas* (both sexes) and many smaller species. I was lucky enough to bag the rare Elephant Beetle, an unusual rutelinid with a long, recurved head horn of the genus *Ceropleophana*. I also took a specimen of what is probably the seldom-collected *Fruhstorferia*, which looks more like a male stag beetle than a scarab.

Dung beetle trapping was productive here as well. Forget cheesecloth or gauze for holding the bait in Malaysia—it rains too often, too hard, and too unpredictably. "Barney Bags" are the only way to go in this country. Remember the mantra of the Barney Bag Users:

> If your eyes are still blinkin' It'll keep on stinkin'

At the bottom of the hill, the big black and yellow birdwing *Troides helena* was common. I had figured on collecting cetonids off flowering trees in the Maxwell Hill area, but never came across any. With this in mind, lugging along a big dedicated tropics net is not recommended.

#### Books

Next, we drove to Penang to catch a flight to our next destination. First, though, we visited a bookstore. I picked up three books here from the series of Malaysia Nature Handbooks, each for about \$10. Of most interest is *Common Malaysian Beetles*, by Vincent Weng-Yew Tung (142 pp. plus 32 color plates) for \$RM 26.40. Of lesser interest is *Common Malaysian Moths*, by Avril Fox (105 pp. plus 32 color plates) for \$RM 25.20, and also *Common Malaysian Butterflies*, by R. Morrell (64 pp. plus 20 color plates) for \$RM 25.20. These handy little guides are published by:

Longman Malaysia Sdn.Bhd 3, Jalan Kilang A 46050 Petaling Jaya Selangor Darul Ehsan MALAYSIA

Their telephone numbers are (03) 7920466 and (03) 7920803.

The Malaysian Nature Society publishes more detailed books, but none on Coleoptera that I am aware of. Their address is:

The Malaysian Nature Society P. O. Box 10750 50724 Kuala Lumpur MALAYSIA

Their telephone number is (03) 7912185, and their FAX number is (03) 7917722. BioQuip carries some of their books. If purchased directly, members receive a discounted price, which is the first price listed.

Moths are covered by *An Introduction to the Moths of South East Asia*, by H. S. Barlow (305 pp. plus 51 color plates) for \$RM65/90. Another work of interest may be the two-volume set *Wayside Trees of Malaysia*, by E. J. H. Conner. Volume I (476 pp. plus 138 black and white plates) and Volume II (384 pp. plus 97 black and white plates) sell for \$RM 120/200.

A book titled *The Butterflies of the Malay Peninsula* by A. S. Corbet and H. M. Pendleberry (595 pp. plus 69 plates), contains some general details about the Malay Peninsula, a map, and plant zones. It can be purchased from BioQuip or from its distributor:

E. W. Classey Ltd. P. O. Box 93 Faringdon, Oxon SN7 7DR ENGLAND

### North, to Langkawi

After a quick tour at a place where batik prints are made and sold, we took a short flight to Langkawi Island, situated in the formerly pirate infested Straits of Melaka, just south of the Thailand border, in the Indian Ocean. A short taxi ride from the airport brought us to Best Western's luxurious Berjaya Langkawi Beach Resort. The lodgings here are very nice, with sumptuous breakfast and dinner buffets included. There is a beach, three pools, tennis courts, a gym, and all the trappings of a five-star resort.

Dung trapping is good here, but I did no light collecting, as our chalet was in the middle of the resort, in disrupted forest, but with a beautiful view of the ocean. I definitely would like to light there, should I ever return. With this in mind, I wrote down the numbers of some of the chalets I think would be ideal—they are situated against dense lowland forest. They are: 4116 and -18; 5101, -02, -06, -12, -14, -19, -20, -21, -22, -30, -31, -32 and -33; 6115, -16, -17 and -18. Anyone who has a chance to blacklight there is requested to write me.

A little time can be spent at a crocodile farm nearby. When one of their critters "kicks the bucket" they use its hide for apparel, which is sold at their gift shop at exorbitant prices, along with a certificate giving you permission to possess items made from protected species.

I should mention that the flights from Penang to Langkawi and from Langkawi back to Kuala Lumpur were both business (first) class, a nice added touch.

#### Kudos to Cheng

One cannot say enough good things about our guide, K. W. Cheng. Cheng is fluent in Malaysian, English, and two dialects of Chinese. He attended to our every need, from Malaysian collecting permits to driving us about on the left side of the road. The roads are not well marked, and it would have been difficult without him. After he observed me photographing a spectacular green damselfly (Neurobasis chinensis chinensis) he gave me its Latin name. He supplied us with detailed, hand-drawn maps of local collecting sites, and tutored us beforehand. At the conclusion of the trip, he gave us a list of all the localities we collected, including elevation.

Cheng's "real" job is a quality control manager in a Japanese textile factory in Penang. He has two young son's, and loves old American pop and 50's music. *Your Cheatin' Heart*, by Ray Charles, is among his favorites.

Should anyone wish to employ him as a private guide, I would suggest giving him several months' notice. His address is:

Mr. K. W. Cheng 502 Jalan Permatang Rawa 14000 Bukit Mertajam Penang, MALAYSIA

His telephone/FAX number is (04) 5399378.

#### If I Did It Again

If I had it to do over, I would travel lighter. Though I brought no generator, I brought much extension cord. One or two little 20-30 foot cords should do, and two white sheets. No vertical frame is needed. I taped the sheet to a window in the Cameron Highlands, and hung it by a thin nylon rope on Maxwell Hill. A tropics net was not needed.

Coleopterists should note that taxis are available by the hour at reasonable rates. If I wanted to set dung traps away from the hotel, or beat for Cerambycids on roadside cutdown, I would not hesitate to rent a taxi and break away from the butterfly collectors. It will be a trip you will not soon forget.

#### New Address

Yes, Editor Barney has finished his midlife schooling and has taken a position in an endodontic group practice in Tucson. Mail can be directed to my work address listed on the first page.

My phone numbers are (520) 615-1430 (home), (520) 322-0800 (work), (800) 322-0887 (work, toll free) and (520) 323-7453 (work FAX). Alternately, my e-mail address is bstreit@flash.net.

#### Avon Skin-So-Soft

Effective insect repellents are worth their weight in gold, especially while collecting in the tropics. Trouble is, whatever is in those concoctions that repels critters utterly stinks. Want to be the sweetestsmelling guy or gal in the forest? Then try Avon Skin-So-Soft, which comes in Original Scent (#315-262) and Herbal Fresh Scent (#315-277). It is touted as an effective moisturizer plus a repellent of mosquitoes, fleas and deer ticks by virtue of a plant-based insect repellent. It also contains SPF 15 PABA-free sunscreen and offers waterproof protection. A 4 fluid ounce tube normally sells for \$9.95, but often is sold on sale for \$7.95.

In the equestrian world, this material is mixed with traditional insect repellents for a sweet smelling, double-action bug beater. Now, anything that can keep flies off horses has got to be good.

#### Nikon's New Macro Lens

A few years ago, Nikon introduced the "Big Daddy" of its famed macro lenses, the 200 mm f/4D ED IF Micro-Nikkor. Is this a lens that scarabaeologists should consider?

Unless you are looking for a tax deduction, and can afford the hefty cost, the answer is decidedly "No." As of this writing, this piece of glass was selling at B & H Photo in New York (800-947-9980) for about \$1,120.00 Whoa! And this is the "gray market" price, including only the international warranty. You must pay more if you want the U. S. warranty as well.

There are other disadvantages that this lens brings. For general photography, it cannot be hand held due to its longer focal length. However, for photomacrography, a flash must be used anyway, so for close-ups, it can be handheld.

Getting the flash out over the lens, where it belongs, is another consideration. For this, there is a flash arm from a small company called Really Right Stuff (P.O. Box 6531, Los Osos, CA 93412, telephone (805) 528-6321, FAX (805) 528-7964). Though extremely well made, it is not cheap either, selling for \$186.00. The flash must be connected to the camera by a cord. They sell a specially shortened Nikon SC-17 cord for \$90.00. This company also sells what are considered the finest quick-release brackets for many makes of cameras. These allow you to attach and detach the camera from a tripod effortlessly.

Even if money were no object, one must consider the all-around awkwardness of this setup. It is heavy, bulky, and takes time to assemble, even if the flash arm if left screwed onto the tripod socket of the lens.

The "ED IF" designation denotes that this lens is made of expensive extra-low dispersion glass and focuses internally. These are desirable qualities. The special glass scatters light less than regular optical glass, yielding brighter, truer colors. Internal focusing is accomplished by moving an internal lens element. This way, the lens stays balanced in your hands (or on the tripod) because it does not grow longer or shorter as you focus.

Are there any other advantages to this lens? Yes. The 200 mm focal length does a couple of things. You can achieve a 1:1 reproduction ratio at a staggering 19 plus inches from the subject. But getting close, say with a shorter 105 mm lens, is not generally a problem with most species of scarabs.

Because the camera is further away, the proportions of the subject are truer, in that the part of the subject closest to the lens will not be disproportionately larger in the final image. This problem is referred to as "dog-nose distortion." The narrower angle of view also means that there will be less of the background in the image. Therefore, the subject will have more presence or "pop."

Extension tubes and 62 mm 5T and 6T supplemental close-up lenses, used singly or in combination, will yield all sorts of other higher magnification ranges. Of course, this holds true for all lenses. Remember also that these close-up lenses, and the smaller 52 mm Nikon close-up lenses (3T and 4T), work beautifully on lenses of other manufacturers.

As a final note, photography buffs will want to order the catalog from Kirk Enterprises Inc. (107 Lange Lane, Angola, IN 46703, telephone (219) 665-3670). They carry all sorts of nifty accessories for the nature photographer.

#### Bugs on the Net

Since our last issue (remember now, we said this newsletter was occasional), the Internet has blossomed into an everyday occurrence for most of us. With this in mind, any readers who desire to have their e-mail address listed in a forthcoming issue please contact Barney at bstreit@flash.net.

The World Wide Web part of the internet has several web sites that may be of interest:

The Coleopterists' Society has a page at http://www.auburn.edu/beetles/. The main page offers the following headings: General Society Information, Society Officers, The Coleopterists' Bulletin, Upcoming Meetings, News and Notices, Prizes and Awards, Information Resources, Society Directory, Beetle Links and Related Sites and Beetle Conservation.

For those of you who did not know, Dr. Art Evans, Ph.D. has donated his entire collection to the Los Angeles County Museum. To commemorate this glorious event, the Museum put up a web page at http://www.lam.mus.ca.us/lacmnh/ departments/research/entomology/ scarabs/. This site also contains color images of assorted scarab beetles. Doctor Art has been busy. Together with Chuck Bellamy (a Buprestidae expert now residing in South Africa) he has authored the popular book *An Inordinate Fondness for Beetles*. The Los Angeles County Museum has put up a page regarding this book at http:// www.lam.mus.ca.us/~lorquin/evans/. I have seen this book for sale at Barnes & Noble. This book was even reviewed by *Discover* magazine (May, 1997, page 108) and included a collage of *Plusiotis* beetles.

Speaking of Chuck Bellamy, check out the page from the Department of Coleoptera at Transvaal Museum at http://www-tm.up.ac.za/coleop/ coleop.htm.

From the land down under, Australia's major science publisher CSIRO, has a page listing their publications, as well as software specially written for generating keys, at http://www.publish.csiro.au/.

A nice discussion of the phylogenetic relationships of Coleoptera (and the suborders within Coleoptera) can be found at http://phylogeny.arizona.edu/tree/ eukaryotes/animals/arthropoda/ hexapoda/coleoptera/coleoptera.html. This page originates from the University of Arizona in Tucson. As one might expect, U of A has a large collection.

A few minutes drive from the University can bring you to the Sonoran Arthropod Studies Institute. Their page is at http:// www.azstarnet.com/~sasi/.

ITIS (Interagency Taxonomic Information System) has a home page of the ITIS Coleoptera Section at http:// www.inhs.uiuc.edu/biod/waterbeetles/ itis-coleoptera.html. This involves a database project for North American Coleoptera.

For those who can read español, Costa Rica has a popular interest page at http:/ /www.inbio.ac.cr/papers/insectoscr/ Coleopt.html.

For those who read français, check http://inapv.inapg.inra.fr/entomo/present.htm for the Coleoptagro page from the Institut National Agronomique Paris-Grignon. Included here are keys to and descriptions of families. Of more general interest, the Department of Entomology at Colorado State University has a page at http:// www.colostate.edu/Depts/Entomology/ ent.html which has many links.

The same can be said of the Department of Entomology at Iowa State University, which can be found at http:// www.ent.iastate.edu/.

The page for the Entomological Society of America can be found at http://www.entsoc.org.

The Young Entomologists Society has a page at http:// insects.ummz.lsa.umich.edu/yes/ yes.html.

From these sites, you should be able to find links to most any web site of interest. The world still awaits Bill Warner's page devoted to dung beetle trapping baits.

# The Ultimate Collecting Hat?

We have all been there: you buy a cheapo bug hat, wear it, then get rained on (or put it in the wash) and presto! Your hat no longer fits. Maybe the bargain was not such a bargain after all.

Billed as the world's finest hat, "The Tilley" comes in three vintages: the short-brimmed T1, the wide-brimmed T2, and the *Scarabs*-recommended medium-brimmed T3. Tilley Endurables is located at 300 Langner Road, West Seneca, New York 14224. Catalogs come with a measuring band and special instructions for ordering, as your traditional hat size will often be too small. Call 1-800ENDURES for a catalog.

The hats are made with pre-shrunk cotton, is insured against loss, has a lifetime guarantee, floats, has ventilation grommets, a secret pocket, a tie cord for windy weather. The brim stiffens in the rain, which is great for Pleocomaniacs and tropical collecting. Besides being rain and mildew repelling, they block both UV-A and UV-B radiation.

The cost? The T3 runs between \$45 and \$49.

Tilley also sells other apparel designed with the traveler in mind: pants and shirts that can be washed in a sink!

#### **Rich and Barney's Adventure**

Some time ago, we mentioned in these pages that Rich and Barney are involved in a publishing effort. Since our last issue, many changes have occurred which should be of interest to our readers. An update is in order.

There are now three entities involved:

L.A. Out-of- Print, On-Demand Publishing, Inc. is the company that reprints important, previously published works whose original copies are no longer available and/or sell for prohibitively expensive prices.

Wolfsgarden Books is the company that publishes new projects. The Cerambycidae was the focus of the first efforts, but major works in the Scarabaeidae and Buprestidae are in the hopper.

The Occasional Papers of the Consortium Coleopterorum is the journal we are establishing to publish papers on taxonomy, etc. This would have a fairly short review time with a limited subscription to some major institutions and a large number of reprints going to the authors so they can fill requests for their articles. Our motivation is to get monographs into print so that we can incorporate any major taxonomic changes into our major projects without the lengthy wait for publication in one of the existing journals. We are busy forming an editorial advisory board. We have a first paper promised by John Chemsak.

L.A. Out-of- Print, On-Demand Publishing, Inc. works in-progress are:

*Longicornia Malayana* by Francis Pascoe, 1866. Work has begun.

*The Tribe Onciderini*, Parts. I & II by L.S. and E.S. Dillon, 1945-6.

We have a signed agreement from the Reading Public Museum, and can begin *Monographie Des Cetoines* by H. Gory & A. Percheron, 1833. Wolfsgarden Books has these titles available:

Checklist of the Cerambycidae and Disteniidae of the Western Hemisphere. by Miguel Monné & Edmund Giesbert. This project is updated each year.

Illustrated Revision of the Cerambycidae of North America, Volume I, by John Chemsak.

Wolfsgarden Books future titles:

From Miguel A. Monné, *Catalogue of Cerambycidae of the Western Hemisphere.*, two volumes.

From Gayle Nelson, *Catalogue of the Buprestidae of North America*. This would serve as a basis for a multi-volume monograph on the Buprestidae of North America which would have illustrated keys and color plates of the species.

From Charles Bellamy (Transvaal Museum, South Africa) and Henry Hespenheide (Life Sciences, UCLA), *The Buprestidae of Mexico*, a multi-volume set, with illustrated keys and color photo plates of the species.

Also from Charles Bellamy, *Catalogue* of Buprestidae of World, two volumes.

A monograph on *Scarabaeidae of North America*, a multi-volume work containing illustrated keys and color photos of the species is still in formative stages.

From Miguel A. Monné & Ubirajara Martins in Brazil, *The Cerambycidae of South America*, a multi-volume set, of course.

From John A. Chemsak, *Illustrated Revision of the Cerambycidae of North America*, Volume II, the Lepturinae. We are making good progress on this project, which treats nearly twice the number of species that appeared in the first volume. The following volume will be on the Cerambycinae.

We are looking forward to the release later this year of the French translation of the *Illustrated Revision of the Cerambycidae of North America.* Vol. I, by John A. Chemsak, translated by D. Keith.

# **Natural History Books**

The titles now available from L.A. Out-of- Print, On-Demand Publishing, Inc. are as follows:

Order	·#:	Biologia Cen	trali-America	ana	Price
1-19	Insect	a-Coleoptera	Vol.I pt.1	Cicindelidae,etc.	\$248
1-22	"	"	Vol.II pt.2	Scarabaeidae,etc.	\$259
1-23	"	"	Vol.III pt.1	Buprestidae,etc.	\$278
1-24	"	"	Vol.III pt.2	Cleridae,etc.	\$248
1-27	"	"	Vol.IV pt.3	Curculionidae	\$273
1-32	"	"	Vol.V	Cerambycidae,etc.	\$268
1-33	"	"	Vol.VI pt.1	Chrysomelidae,etc.	\$275
1-34	"	"	Vol.VI pt.1	" Supplement	\$205
1-35	"	"	Vol.VI pt.2	"	\$205
1-36	"	"	Vol.VII	Erotylidae, etc.	\$245
1-50	"	Neuroptera,	Ephemerida	ne, Odonata, etc.	\$238
1-55	"	Rhyncota: H	Homoptera-C	Cicadidae, Fulgoridae	\$235

Systema Cerambycidarum by James Thomson, 1866; 540 p. \$156

Cerambycid	ae Of North America by E. G. Linsley & J. A. Chemsak	
Pt.I	Introduction, 1961	\$83
Pt.II	Parandrinae, Prioninae, Spondylinae, Aseminae, 1962	\$78
Pt.III	Cerambycinae (Opsimini-Megaderini), 1962	\$76
Pt.IV	Cerambycinae (Elaphidioni-Rhinotragini), 1963	\$73
Pt.V	Cerambycinae (Callichromini-Ancylocerini), 1964	\$74
Pt.VI, no.1	Lepturinae, 1972	\$76
Pt.VI, no.2	Lepturinae, 1976	\$76

Wolfsgarden Books has these titles available:

*Checklist of the Cerambycidae and Disteniidae of the Western Hemisphere.* by Miguel A. Monné & Edmund Giesbert, 1995 edition. Price \$74.60.

Illustrated Revision of the Cerambycidae of North America, Volume I, by John A. Chemsak. Price \$138.60

These companies can be reached at:

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